CLAIMS

1. An isostatic press, comprising

a pressure chamber for accommodating a pressure medium, the pressure chamber being enclosed by a force-absorbing body,

a prestressing means provided around an outer envelope surface of the force-absorbing body, the force-absorbing body thereby being radially prestressed, and

at least one tunnellike passage running essentially over the length of said outer envelope surface of the force-absorbing body, the tunnellike passage being defined by a groove in said outer envelope surface of the force-absorbing body and a portion of said prestressing means covering said groove, for conducting pressure medium to a point of detection if such medium has leaked out from the pressure chamber to the outer envelope surface of the force-absorbing body.

2. An isostatic press, comprising

a cylindrical element comprising an inner surface defining a pressure treatment chamber for accommodating a pressure medium and an outer envelope surface,

a single prestressing means provided around said outer envelope surface of the cylindrical element for inducing a radial prestress in the cylindrical element, and

at least one tunnellike passage running essentially along said outer envelope surface of the cylindrical element, the tunnellike passage being defined by a groove in said outer envelope surface of the cylindrical element and a portion of said prestressing means covering said groove, for conducting pressure medium to a point of detection if such medium has leaked out from the pressure chamber to the outer envelope surface of the cylindrical element.

3. The isostatic press as claimed in claim 1, wherein said force absorbing body is a cylindrical wall of a pressure vessel.

4. An isostatic press as claimed in claim 2, wherein said cylindrical element is a force-absorbing cylindrical wall of a pressure vessel.

5. The isostatic press as claimed in claim 2, wherein said cylindrical element is a protective liner and said prestressing means is a surrounding concentric force-absorbing cylindrical wall of a pressure vessel, wherein the cylindrical wall is shrunk on the outer envelope surface of the protective liner.

6. The isostatic press as claimed in any one of claims 1-4, wherein said prestressing means is wire-shaped or band-shaped and is wound around said outer envelope surface.

7. The isostatic press as claimed in any one of claims 1-4, wherein said prestressing means is cylindrical and is shrunk on said outer envelope surface.

8. The isostatic press as claimed in any one of claims 1-7, wherein the cross-sectional area of the tunnellike passage is dimensioned to conduct a pressure medium flow, i.e. volume per time unit, essentially equal to or larger than the flow of pressure medium supplied into the pressure chamber by a pumping device.

9. The isostatic press as claimed in any one of claims 1-7, wherein the cross-sectional area of the tunnellike passage is dimensioned to conduct a pressure medium flow, i.e. volume per time unit, lower than the flow of pressure medium supplied into the pressure chamber by a pumping device.

10. The isostatic press as claimed in any one of claims 1-9, wherein said at least one tunnellike passage runs in the form of a spiral around said outer envelope surface and essentially along the whole of its length.

11. The isostatic press as claimed in any one of claims 1-10, wherein the press comprises at least two tunnellike passages running essentially along said outer envelope surface, each tunnellike passage being defined by a respective groove in said outer envelope surface and a portion of said prestressing means covering said groove.

12. The isostatic press as claimed in claim 11, wherein at least two of said tunnellike passages run in parallel with each other in the form of spirals around said outer envelope surface and essentially along the whole of its length.

13. The isostatic press as claimed in any one of claims 11-12, wherein at least one groove intersects at least another groove, thereby enabling pressure medium to flow from one tunnellike passage to another tunnellike passage.

14. The isostatic press as claimed in claim 13, wherein

at least one first groove runs in the form of a spiral inclined in one direction relative to the circumference of said outer envelope surface, and

at least one second groove runs in the form of a spiral inclined in the opposite direction relative to the circumference of said outer envelope surface, thereby intersecting said at least one first groove.

15. The isostatic press as claimed in any one of claims 11-14, wherein the groove or grooves are dimensioned and arranged along said outer envelope surface in such manner that, when a crack has propagated through the wall and grown so that it opens into a groove, the crack must not have reached the so called critical size.

16. A method of manufacturing an isostatic press, comprising:

providing a cylindrical element comprising an inner surface defining a pressure treatment chamber for accommodating a pressure medium and an outer envelope surface,

providing said outer envelope surface with at least one groove running essentially over the length of said outer envelope surface, and

applying a single prestressing means on said outer envelope surface for inducing a compressive radial prestress in said cylindrical element and simultaneously creating at least one tunnellike passage defined by said groove and a portion of said prestressing means covering said groove.

17. The method as claimed in claim 16, wherein said cylindrical element is dimensioned to become a force-absorbing wall of a pressure vessel and wherein the prestressing means is wire-shaped or band-shaped, the method further comprising winding the prestressing means around and covering essentially the whole outer envelope surface of the cylindrical element.

18. The method as claimed in claim 16, wherein said cylindrical element is a protective liner and wherein said prestressing means is dimensioned to become a cylindrical wall of a force-absorbing pressure vessel, the method further comprising shrinking said prestressing

means on the outer envelope surface of the protective liner.